

CLAIMS:

1. A packaging and filling apparatus for vertically sealing a web of packaging material in the form of a tube, filling the tube with a fluid product, forming lateral
5 seal bands by sealing the tube in the direction in which the bands intersect the tube, cutting the middle of each lateral seal band of a series of pillow-like preformed bodies with a cutting device such that the pillow-like preformed bodies are severed from each other, thus forming a packaging and filling container of the final form, the packaging and filling apparatus characterized in that:
10 the cutting device comprises:

a resistance measuring means for measuring the cutting resistance that a packaging material cutting blade in the cutting device receives from the packaging material, and then outputting a measurement value obtained; and

a blade monitoring means for monitoring the condition of the packaging material
15 cutting blade based upon the measurement value.
2. A packaging and filling apparatus according to claim 1, wherein the blade monitoring means monitors the condition of the packaging material cutting blade based upon a profile of the measurement value.
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3. A packaging and filling apparatus according to claim 2, wherein the blade monitoring means monitors the condition of the packaging material cutting blade based upon a comparison between the profile of the measurement value and a profile of a predetermined reference value.
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4. A packaging and filling apparatus according to claim 3, wherein the blade monitoring means monitors the condition of the packaging material cutting blade based upon a comparison, of a pressure difference between the maximum resistance pressure obtained from the profile of the measurement value and a constant resistance
30 pressure following the maximum resistance pressure, with a reference value of a predetermined pressure difference.
5. A packaging material cutting device for use in a packaging and filling apparatus for vertically sealing a web of packaging material in the form of a tube, filling the

tube with a fluid product, forming lateral seal bands by sealing the tube in the direction in which the bands intersect the tube, cutting the middle of each lateral seal band of a series of pillow-like preformed bodies with a cutting device such that the pillow-like preformed bodies are severed from each other, thus forming a packaging and filling container of the final form, the cutting device characterized by comprising:
5 a resistance measuring means for measuring the cutting resistance that a packaging material cutting blade in the cutting device receives from the packaging material, and then outputting a measurement value obtained; and
a blade monitoring means for monitoring the condition of the packaging material cutting blade based upon the measurement value.
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6. A packaging material cutting device according to claim 5, wherein the blade monitoring means monitors the condition of the packaging material cutting blade based upon a comparison, of a pressure difference between the maximum resistance pressure obtained from a profile of the measurement value and a constant resistance pressure following the maximum resistance pressure, with a reference value of a predetermined pressure difference.
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